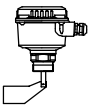
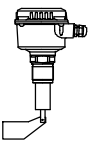
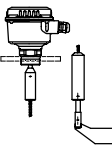
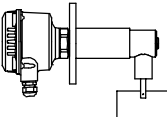
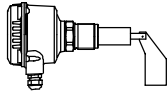
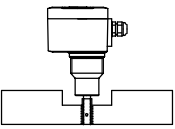


Table of contents

	Page
Overview	P2
Specifications	P4
Applications	P6
<hr style="border-top: 1px dashed black;"/>	
RN ..001 Short extension length	P8
	
<hr style="border-top: 1px dashed black;"/>	
RN ..002 Pipe extension vertical	P10
	
<hr style="border-top: 1px dashed black;"/>	
RN ..002-rope Rope extension	P12
	
<hr style="border-top: 1px dashed black;"/>	
RN ..003 Angled extension	P14
	
<hr style="border-top: 1px dashed black;"/>	
RN ..004 Pipe extension horizontal	P16
	
<hr style="border-top: 1px dashed black;"/>	
RN 3005 Extra short version	P18
	
<hr style="border-top: 1px dashed black;"/>	
Options	P20
Dimensions	P23
Detailed Ex-markings	P27
Electrical installation	P28
Spare parts	P31

Subject to technical change.

Valid from 01.04.2010 until 31.03.2011 unless otherwise agreed.

All dimensions in mm (inches).

By publishing this option list all other option lists become invalid.

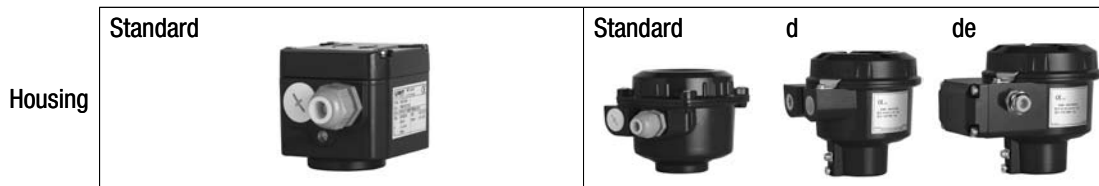
We assume no liability for typing errors.

Different variations to those specified are possible.
 Please contact our technical consultants.

Overview

- Level limit detection in bulk goods / solids
- Compact unit
- Die-casted housing aluminium
- Very robust and reliable sensors
- Wide range of applications, no maintenance
- Full-, demand-, empty detector
- ATEX, FM, CSA GasEx and DustEx approvals

Series	RN 3000	RN 6000
	ATEX approval Small housing Sensitivity > 15 g/l (0.9lb/ft ³)	ATEX / FM / CSA approval Spacious housing Sensitivity > 15 g/l (0.9lb/ft ³)



Overview

RN ..002-rope
Rope extension

RN 3002-rope



RN 6002-rope



RN ..003
Angled extension

RN 3003



RN 6003



RN ..004
Pipe extension
horizontal

RN 3004



RN 6004



RN 3005
Extra short version
for use in
loading bellow

RN 3005



Specifications

Series		RN 3000	RN 6000
Approvals	CE	•	•
	ATEX:		
	Zone 20/21 Dust Ignition Proof	•	•
	Zone 1 Flameproof / Increased Safety		•
	FM / CSA:		
	General purp.		•
	Cl. II, III Div. 1 Dust Ignition Proof		•
	Cl. I Div. 1 Explosionproof		•
Zone 1 Flameproof / Increased Safety		•	
Electronics	Power supply		
	AC version 24V or 48V or 115V or 230V AC	•	•
	DC version 24V DC	•	•
	Multivoltage 24V DC / 115V AC / 230V AC	•	•
	Output signal:		
	Microswitch SPDT contact	•	•
Microswitch DPDT contact (option pos.25y)		•	
Technical data	Ambient temperature	-25 .. +60°C (-13 .. +140°F)	
	Process connection material	Aluminium or 1.4305 (SS 303) or 1.4404 (316L)	
	Material of measuring vane and shaft	1.4301 (SS 304) or 1.4305 (SS 303) or 1.4404 (316L)	

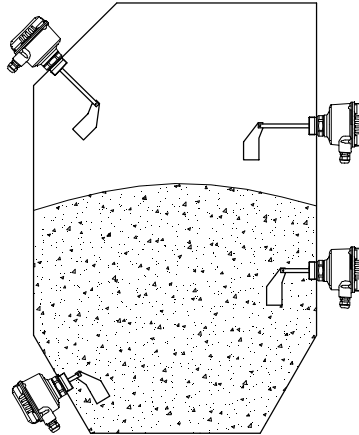
Specifications

		RN 3000	RN 6000	
Extensions	RN ..001	Process temperature	-40/ -25 .. +80 /150 /250 /600°C (-40/-13 .. +176 /302 /482 /1112°F)	
		Process pressure	-0.5 .. +0.8bar; -0.8 .. +5 / 10bar (-6.8 ..+11.6; -10.4 .. +72.5 / 145psi)	
		Length of extension		
		Full detector vertical from the top	70 .. 300mm (2.76 .. 11.8")	
		Full detector oblique from the top	70 .. 300mm (2.76 .. 11.8")	
		Full detector horizontal	70 .. 300mm (2.76 .. 11.8")	
		Demand or empty detector horizontal	70 .. 150mm (2.76 .. 5.9") *	
		Empty detector oblique from the bottom	70 .. 150mm (2.76 .. 5.9") *	
	RN ..002	Process temperature	-40/-25 ..+80 /150 /250 /350 /600°C (-40/-13 ..+176 /302 /482 /662 /1112°F)	
		Process pressure	-0.5 .. +0.8bar; -0.8 .. +5 / 10bar (-6.8 ..+11.6; -10.4 .. +72.5 / 145psi)	
		Length of extension		
		Full detector vertical from the top	250 .. 3.000mm (9.84 .. 118") / 10.000mm (394") with support of the extension pipe	
	Full detector oblique from the top	250 .. 3.000mm (9.84 .. 118") with option "Bearing at tube end"		
	RN..002-rope	Process temperature	-40/-25 ..+80 /150 /250 /350 /600°C (-40/-13 ..+176 /302 /482 /662 /1112°F)	
		Process pressure	-0.5 .. +0.8bar; -0.8 .. +5 / 10bar (-6.8 ..+11.6; -10.4 .. +72.5 / 145psi)	
		Length of extension		
		Full detector vertical from the top	500 .. 10.000mm (19.7 .. 394") (observe max. traction)	
	RN ..003	Process temperature	-40/-25 .. +80 /150 /250°C (-40/-13 .. +176 /302 /482°F)	
		Process pressure	-0.5 .. +0.8bar; -0.8 .. +5 / 10bar (-6.8 ..+11.6; -10.4 .. +72.5 / 145psi)	
		Length of extension		
Demand or empty detector horizontal		125 .. 300mm (4.92 .. 11.8")		
Empty detector oblique from the bottom		125 .. 300mm (4.92 .. 11.8")		
RN ..004	Process temperature	-40/-25 .. +80 /150 /250 /600°C (-40/-13 .. +176 /302 /482 /1112°F)		
	Process pressure	-0.5 .. +0.8bar; -0.8 .. +5 / 10bar (-6.8 ..+11.6; -10.4 .. +72.5 / 145psi)		
	Length of extension			
	Full detector vertical from the top	150 .. 300mm (5.90 .. 11.8")		
	Full detector oblique from the top	150 .. 300mm (5.90 .. 11.8")		
	Full detector horizontal	150 .. 300mm (5.,90 .. 11.8")		
	Demand or empty detector horizontal	150 .. 300mm (5.90 .. 11.8") *		
Empty detector oblique from the bottom	150 .. 300mm (5.90 .. 11.8") *			
RN 3005	Process temperature	-40/-25 .. +80°C (-40/-13 .. +176°F)		
	Process pressure	-0.8 .. +0.8bar (-10.4 .. +11.6psi)		
	Length of extension			
	Application "Loading bellow"	100mm (3.94")		

* A protective canopy is recommended for applications with high mechanical loads

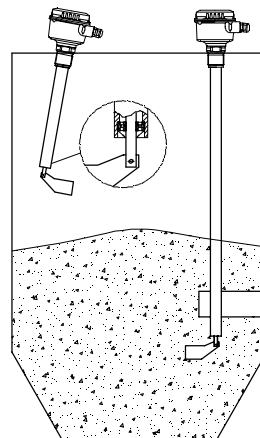
Applications

RN..001 Short extension length



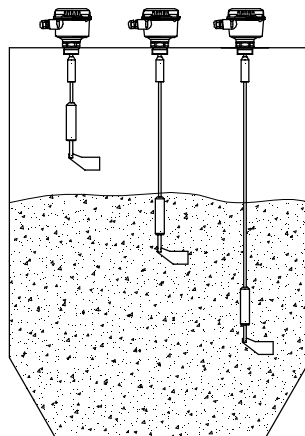
Horizontal mounting:
Boot shaped vane
recommended
(min. mech. loading as
the vane aligns itself to
the material flow).

RN..002 Pipe extension vertical



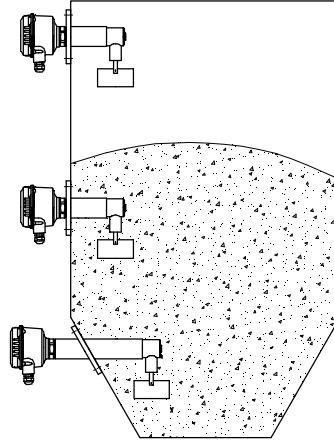
Deviation up to max.
10° from vertical
installation only with
option „bearing at
tube end“ possible

RN..002 - rope Rope extension

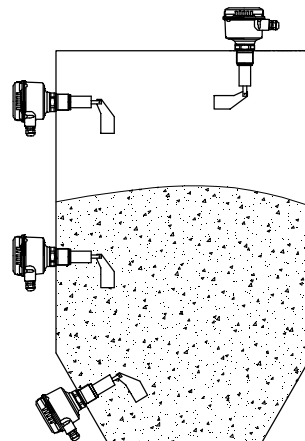


Applications

RN ..003
Angled extension

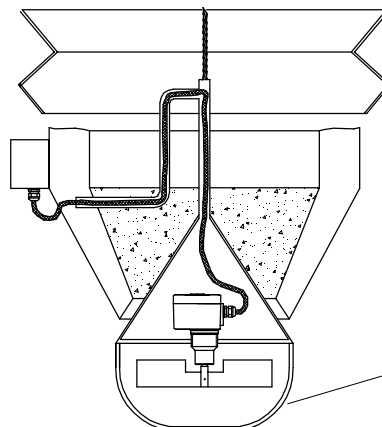


RN ..004
Pipe extension horizontal



Horizontal mounting:
Boot shaped vane
recommended
(min. mech. loading as
the vane aligns itself to
the material flow).

RN 3005
Extra short version



Application
„Loading bellow“

mechanical
protection for
sensor

RN ..001 Short extension length

RN 3001



RN 6001



Version for food applications with option pos.29y (page 20)

Housings RN 6001



Standard



d (flameproof)



de (flameproof/
increased safety)

Cable entries

Depending on model selected, the following cable entries will be delivered (options see pos 28 on page 20):

Version:	Cable entries:
ATEX flameproof (pos.2 T)	M20x1.5 (1x conduit + 1x Ex-d blind plug)
FM and CSA (pos.2 M,N,S,U)	NPT 1/2" tapered ANSI B1.20.1 (1x conduit + 1x Ex-d blind plug)
All other versions	M20x1.5 (1x screwed cable gland + 1x blind plug)

Dimensions

see pages 23 - 27

Basic Type

RN 3001

RN 6001

Pos. 2 Certificate (detailed Ex-markings: see page 27)

Zerti- fikat	Zone / Div		Schutzart
	Staub	Gas	
0	CE	-	-
W	ATEX	Zone 20/21	-
R	ATEX	Zone 20/21	Zone 1
T	ATEX	Zone 20/21	Zone 1
M	FM / CSA	-	-
N	FM / CSA	Cl. II, III, Div.1	-
	CSA	A 20/21	-
S	FM / CSA	Cl. II, III, Div.1	Zone 1
	CSA	A 20/21	-
U	FM / CSA	Cl. II, III, Div.1	Cl. I Div.1 / Zone 1
	CSA	A 20/21	-

Pos. 3

Process temperature

- 1 max. + 80°C (176°F)
- 2 max. +150°C (302°F)
- 3 max. +250°C (482°F) (220°C (428°F) for RN 3001 ATEX)
- 5 max. +600°C (1112°F) (not for Ex, only with pos. 4.1)

Pos. 4

Process overpressure

- 1 max. 0,8 bar (11,6psi) (0.1bar (14.5psi) mit Pos. 3.5)
- 2 max. 5 bar (73psi)
- 3 max. 10 bar (145psi)

RN ..001 Short extension length

• •	pos. 5	Power supply	
• •	A / S	230V AC 50–60 Hz	Motor Speed: A=1/min S= 5/min
• •	B / T	115V AC 50–60 Hz	Motor Speed: B=1/min T= 5/min
• •	C / U	48V AC 50–60 Hz	Motor Speed: C=1/min U= 5/min
• •	D / V	24V AC 50–60 Hz	Motor Speed: D=1/min V= 5/min
• •	E / W	24V DC	Motor Speed: E=1/min W= 5/min
• •	M / Y	230V AC/115V AC/24V DC multivoltage	Motor Speed: M=1/min Y= 5/min
• •	Pos. 6	Process connection	
• •	A	thread G 1½ inch, . DIN 228	
• •	B	thread G 1¼ inch, . DIN 228	(max. 250°C)
• •	C	thread G 1 inch, DIN 228	(max. 250°C; not for pos 2. R,S,T,U)
• •	D	thread M32x1.5	(up to max. 0.8 bar (11.6psi) (max. 250°C; not for pos 2. R,S,T,U)
• •	E	thread M30x1.5	(up to max.0.8 bar (11.6psi)/80°C (176°F) (not for pos 2. R,S,T,U)
• •	F	thread NPT 1½ inch, conical ANSI B1.20.1	
• •	Q	thread NPT 1¼ inch, conical ANSI B1.20.1	(max. 250°C)
• •	G	thread NPT 1 inch, conical ANSI B1.20.1	(max. 250°C; not for pos 2. R,S,T,U)
• •	P	Triclamp 2" (DN 50) ISO 2852	(max. 80°C)
• •	H	flange 150x150, 4x ø18 LK–ø170	(up to max. 0.8 bar (11.6psi))
• •	I	flange 150x150, 4x ø14 LK–ø170	(up to max. 0.8 bar (11.6psi))
• •	K	flange DN32 PN6, EN 1092–1	(max. 5 bar / 250°C)
• •	L	flange DN100 PN6, EN 1092–1	(up to max. 5 bar (73psi))
• •	M	flange DN100 PN16, EN 1092–1	
• •	S	flange 2" 150lbs ANSI B16.5	
• •	T	flange 3" 150lbs ANSI B16.5	
• •	U	flange 4" 150lbs ANSI B16.5	
• •	Pos. 7	Material Process connection	
• •	1	aluminium	(up to max. 0.8 bar (11.6psi) / 80°C (176°F)
• •	3	stainless steel 1.4305 (303) A–G / 1.4301 (304) P–I / 1.4541 (321) K–U	
• •	7	stainless steel 1.4404 (316L)	(only with pos. 9.7)
• •	Pos. 8	Length of extension "L"	
• •	K	70 mm (2.76") (only with vane P)	
• •	A	100 mm (3.93") (only with vane A, D, R, B, C, E)	
• •	B	150 mm (5.90")	
• •	C	200 mm (7.87")	
• •	D	250 mm (9.84")	
• •	E	300 mm (11.8")	
• •	Z	other lengthes	price per 50mm (1.97") or part thereof (starting from 0mm) min. 350 mm (13.8"), max. 1000mm (59")
• •	Pos. 9	Material of extension "L"	
• •	3	stainless steel 1.4305 (303)	
• •	7	stainless steel 1.4404 (316L)	(only with pos. 7.7 and 10.A, L=16mm longer)
• •	Pos. 10	Measuring vane	
• •	A	boot-shaped* 40 x 98mm (1.57 x 3.86")	for 1 1/2" socket
• •	D	boot-shaped* 35 x 106mm (1.38 x 4.17")	for 1 1/4" socket ("L" at Pos.8 is 16mm longer)
• •	R	boot-shaped* 28 x 98mm (1.10 x 3.86")	for 1" and M32 socket
• •	B	rectangular 50 x 98mm (1.97 x 3.86")	
• •	C	rectangular 50 x 150mm (1.97 x 5.90")	
• •	E	rectangular 50 x 250mm (1.97 x 9.84")	
• •	F	rectangular 98 x 98mm (3.86 x 3.86")	
• •	G	rectangular 98 x 150mm (3.86 x 5.90")	
• •	I	rectangular 98 x 250mm (3.86 x 9.84")	
• •	K	hinged vane 98 x 200mm (3.86 x 7.87") double sided	(max. 250°C)
• •	S	hinged vane 98 x 100mm (3.86 x 3.93") single sided	(max. 250°C)
• •	M	rubber vane 98 x 250mm (3.86 x 9.84") (up to max.80°C (176°F), not for Ex)	
• •	P	notched 40 x 80mm (1.57 x 3.15")	
• •	Y	without	including splint pin for fixation

Further options and accessories: see page 20

Basic type

	A									
Position	1	2	3	4	5	6	7	8	9	10

← Order code

All positions are available in special design (use code "Z").

* maximum length of socket 40mm

RN ..002 Pipe extension vertical

RN 3002



RN 6002



Without sealing and bearing
 at tube end (see also option
 pos. 32)

Version for food
 applications with option
 pos.29y (page 20)

Housings RN 6002



Standard



d (flameproof)



de
 (flameproof/
 increased safety)

Cable entries

Depending on model selected, the following cable entries will be delivered (options see pos 28 on page 20):

Version:	Cable entries
ATEX flameproof (pos.2 T) FM and CSA (pos.2 M,N,S,U) All other versions	M20x1.5 (1x conduit + 1x Ex-d blind plug) NPT 1/2" tapered ANSI B1.20.1 (1x conduit + 1x Ex-d blind plug) M20x1.5 (1x screwed cable gland + 1x blind plug)

Dimensions
 see pages 23 - 27

Basic type

RN 3002
 RN 6002

pos. 2 Certificate (detailed Ex-markings: see page 27)

Certificate	Zone / Div		Protection method
	Dust	Gas	
0 CE	-	-	
W ATEX	Zone 20/21	-	Dust Ignition Proof
R ATEX	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
T ATEX	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
M FM / CSA	-	-	General purpose
N FM / CSA	Cl. II, III, Div.1 A 20/21	-	Dust Ignition Proof
S FM / CSA	Cl. II, III, Div.1 A 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
U FM / CSA	Cl. II, III, Div.1 A 20/21	Cl. I Div.1 / Zone 1	Explosion Proof / Dust Ignition Proof

RN ..002 Pipe extension vertical

• •	pos. 3	Process temperature	
• •		1	max. + 80°C (176°F)
• •		2	max. +150°C (302°F)
• •		3	max. +250°C (482°F) (220°C (428°F) for RN 3002 ATEX)
• •		5	max. +600°C (1112°F) (not for Ex, only with pos. 4.1)
• •	pos. 4	Process overpressure	
• •		1	max. 0.8 bar (11.6psi) (0.1bar (14.5psi) with pos. 3.5)
• •		2	max. 5 bar (73psi)
• •		3	max. 10 bar (145psi)
• •	pos. 5	Power supply	
• •	A / S	230V AC 50–60 Hz	..... Motor Speed: A=1/min S= 5/min
• •	B / T	115V AC 50–60 Hz	..... Motor Speed: B=1/min T= 5/min
• •	C / U	48V AC 50–60 Hz	..... Motor Speed: C=1/min U= 5/min
• •	D / V	24V AC 50–60 Hz	..... Motor Speed: D=1/min V= 5/min
• •	E / W	24V DC	..... Motor Speed: E=1/min W= 5/min
• •	M / Y	230V AC/115V AC/24V DC multivoltage	..... Motor Speed: M=1/min Y= 5/min
• •	pos. 6	Process connection	
• •	A	thread G 1½ inches, DIN 228	.....
• •	B	thread G 1¼ inches, DIN 228	..... (max. 250°C)
• •	F	thread NPT 1½ inches, conical ANSI B1.20.1	.....
• •	Q	thread NPT 1¼ inches, conical ANSI B1.20.1	..... (max. 250°C)
• •	P	Triclamp 2" (DN 50) ISO 2852	..... (max. 80°C)
• •	H	flange 150x150, 4x ø18 LK–ø170	..... (up to max. 0.8 bar (11.6psi))
• •	I	flange 150x150, 4x ø14 LK–ø170	..... (up to max. 0.8 bar (11.6psi))
• •	K	flange DN32 PN6, EN 1092–1	..... (up to max. 5 bar (73psi))
• •	L	flange DN100 PN6, EN 1092–1	..... (up to max. 5 bar (73psi))
• •	M	flange DN100 PN16, EN 1092–1	.....
• •	S	flange 2" 150lbs ANSI B16.5	.....
• •	T	flange 3" 150lbs ANSI B16.5	.....
• •	U	flange 4" 150lbs ANSI B16.5	.....
• •	Pos. 7	Material Process connection	
• •		1	aluminium (max. 0,8 bar / 80°C)
• •		3	stainless steel 1.4305 (303) A–Q / 1.4301 (304) P–I / 1.4541 (321) K–U
• •		7	stainless steel 1.4404 (316L) (only with pos. 9.7)
• •	pos. 8	Length of extension "L"	
• •	Z	price per 100mm (3.94") or part thereof (starting from 0mm)	.....
• •		min. 250mm (9.84"), max. 10.000mm (394") (Ex 6.000mm (236"))	
• •	pos. 9	Material of extension "L"	
• •		1	aluminium (up to max. 0.8 bar (11.6psi) / 250°C (482°F))
• •		3	stainless steel 1.4305 (303)
• •		7	stainless steel 1.4404 (316L) (only with pos. 7.7 und 10.A, L=16mm longer)
• •	pos. 10	Measuring vane	
• •	A	boot-shaped* 40 x 98mm (1.57 x 3.86")	..... for 1 1/2" socket
• •	D	boot-shaped* 35 x 106mm (1.38 x 4.17")	..... for 1 1/4" socket
• •			..... ("L" at pos.8 is 16mm longer)
• •	B	rectangular 50 x 98mm (1,97 x 3,86")	.....
• •	C	rectangular 50 x 150mm (1.97 x 5.90")	.....
• •	E	rectangular 50 x 250mm (1.97 x 9.84")	.....
• •	F	rectangular 98 x 98mm (3.86 x 3.86")	.....
• •	G	rectangular 98 x 150mm (3.86 x 5.90")	.....
• •	I	rectangular 98 x 250mm (3.86 x 9.84")	.....
• •	K	hinged vane 98 x 200mm (3.86 x 7.87") double sided	..... (max. 250°C)
• •	S	hinged vane 98 x 100mm (3.86 x 3.93") single sided	..... (max. 250°C)
• •	M	rubber vane 98 x 250mm (3.86 x 9.84") (up to max.80°C (176°F), not for Ex)	.....
• •	Y	without	..... including splint pin for fixation

Further options and accessories: see page 20

Basic type

	B						Z			
Position	1	2	3	4	5	6	7	8	9	10

All positions are available in special design (use code "Z").

— L= mm ← Order code

* maximum length of socket 40mm

RN ..002-rope Rope extension

RN 3002 - rope



RN 6002 - rope



Housings RN 6002-rope



Standard



d (flameproof)



de
(flameproof /
increased safety)

Cable entries

Depending on model selected, the following cable entries will be delivered (options see pos 28 on page 20):

Version:	Cable entries
ATEX flameproof (pos.2 T)	M20x1.5 (1x conduit + 1x Ex-d blind plug)
FM and CSA (pos.2 M,N,S,U)	NPT 1/2" tapered ANSI B1.20.1 (1x conduit + 1x Ex-d blind plug)
All other versions	M20x1.5 (1x screwed cable gland + 1x blind plug)

Dimensions

see pages 23 - 27

Basic type

RN 3002-Rope

RN 6002-Rope

pos. 1 Types

- • C Standard (max. 4kN load)
- • H Strengthened .. (max. 28kN load) (up to max. 80°C (176°F)) (with pos.2 R,S,T,U on request)

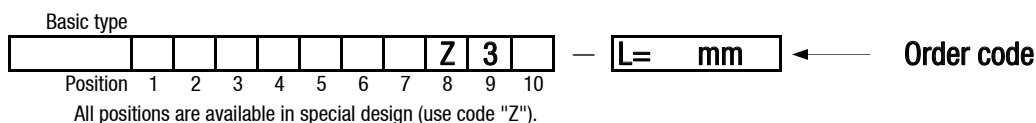
pos. 2 Certificate (detailed Ex-markings: see page 27)

Certi- ficate	Zone / Div		Protection method
	Dust	Gas	
0 CE	-	-	
W ATEX	Zone 20/21	-	Dust Ignition Proof
R ATEX	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
T ATEX	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
M FM / CSA	-	-	General purpose
N FM / CSA	Cl. II, III, Div.1	-	Dust Ignition Proof
	CSA A 20/21		
S FM / CSA	Cl. II, III, Div.1	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
	CSA A 20/21		
U FM / CSA	Cl. II, III, Div.1	Cl. I Div.1 / Zone 1	Explosion Proof / Dust Ignition Proof
	CSA A 20/21		

RN ..002-rope Rope extension

• •	Pos. 3	Process temperature	
• •		1	max. + 80°C (176°F)
• •		2	max. +150°C (302°F)
• •		3	max. +250°C (482°F) (220°C (428°F) for RN 3002–Seil ATEX)
• •		5	max. +600°C (1112°F) (not for Ex, only with pos. 4.1)
• •	Pos. 4	Process overpressure	
• •		1	max. 0.8 bar (11.6psi) (0.1bar (14.5psi) mit Pos. 3.5)
• •		2	max. 5 bar (73psi)
• •		3	max. 10 bar (145psi)
• •	pos. 5	Power supply	
• •	A / S	230V AC 50–60 Hz	Motor Speed: A=1/min S= 5/min
• •	B / T	115V AC 50–60 Hz	Motor Speed: B=1/min T= 5/min
• •	C / U	48V AC 50–60 Hz	Motor Speed: C=1/min U= 5/min
• •	D / V	24V AC 50–60 Hz	Motor Speed: D=1/min V= 5/min
• •	E / W	24V DC	Motor Speed: E=1/min W= 5/min
• •	M / Y	230V AC/115V AC/24V DC multivoltage ..	Motor Speed: M=1/min Y= 5/min
• •	pos. 6	Process connection	
• •	A	thread G 1½ inch, DIN 228	
• •	B	thread G 1¼ inch, DIN 228	(max. 250°C)
• •	F	thread NPT 1½ inch, conical ANSI B1.20.1	
• •	Q	thread NPT 1¼ inch, conical ANSI B1.20.1	(max. 250°C)
• •	H	flange 150x150, 4x ø18 LK–ø170	(up to max. 0.8 bar (11.6psi))
• •	I	flange 150x150, 4x ø14 LK–ø170	(up to max. 0.8 bar (11.6psi))
• •	K	flange DN32 PN6, EN 1092–1	(max. 5 bar / 250°C)
• •	L	flange DN100 PN6, EN 1092–1	(up to max. 5 bar (73psi))
• •	M	flange DN100 PN16, EN 1092–1	
• •	S	flange 2" 150lbs ANSI B16.5	
• •	T	flange 3" 150lbs ANSI B16.5	
• •	U	flange 4" 150lbs ANSI B16.5	
• •	pos. 7	Material process connection	
• •	1	aluminium	(up to max. 0.8 bar (11.6psi) / 80°C (176°F))
• •	3	stainless steel 1.4305 (303) A–Q / 1.4301 (304) H–I / 1.4541 (321) K–U	
• •	Pos. 8	Length of extension "L"	
• •	Z	price per 100mm (3.94") or part thereof (starting from 0mm)	
		min. 500mm (19.69") pos 1C / 1000mm (39.4") pos 1H; max. 10.000mm (394")	
• •	pos. 10	Measuring vane	
• •	A	boot-shaped* 40 x 98mm (1.57 x 3.86")	for 1 1/2" socket
• •	D	boot-shaped* 35 x 106mm (1.38 x 4.17")	for 1 1/4" socket
			("L" at Pos.8 is 16mm longer)
• •	B	rectangular 50 x 98mm (1.97 x 3.86")	
• •	C	rectangular 50 x 150mm (1.97 x 5.90")	
• •	E	rectangular 50 x 250mm (1.97 x 9.84")	
• •	F	rectangular 98 x 98mm (3.86 x 3.86")	
• •	G	rectangular 98 x 150mm (3.86 x 5.90")	
• •	I	rectangular 98 x 250mm (3.86 x 9.84")	
• •	K	hinged vane 98 x 200mm (3.86 x 7.87")	double sided (max. 250°C)
• •	S	hinged vane 98 x 100mm (3.86 x 3.93")	single sided (max. 250°C)
• •	M	rubber vane 98 x 250mm (3.86 x 9.84")	..... (max.80°C, not for Ex)
• •	Y	without	including splint pin for fixation

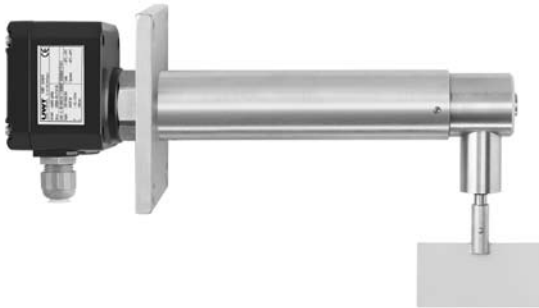
Further options and accessories: see page 20



* maximum length of socket 40mm

RN ..003 Angled extension

RN 3003



RN 6003



Housings RN 6003



Cable entries

Depending on model selected, the following cable entries will be delivered (options see pos 28 on page 20):

Version:	Cable entries:
ATEX flameproof (pos.2 T)	M20x1.5 (1x conduit + 1x Ex-d blind plug)
FM and CSA (pos.2 M,N,S,U)	NPT 1/2" tapered ANSI B1.20.1 (1x conduit + 1x Ex-d blind plug)
All other versions	M20x1.5 (1x screwed cable gland + 1x blind plug)

Dimensions see pages 23 - 27

Basic type

- RN 3003**
- RN 6003**

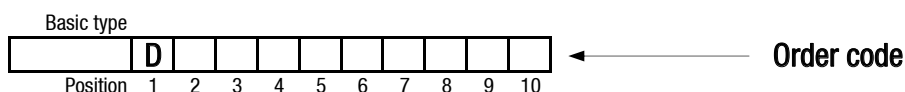
pos. 2 **Certificate** (detailed Ex-markings: see page 27)

Certi- ficate	Zone / Div		Protection method		
	Dust	Gas			
0	CE	–	–		
•	W	ATEX	Zone 20/21	Dust Ignition Proof	
•	R	ATEX	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
•	T	ATEX	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
•	M	FM / CSA	–	–	General purpose
•	N	FM / CSA	Cl. II, III, Div.1	–	Dust Ignition Proof
•	S	FM / CSA	Cl. II, III, Div.1	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
•	U	FM / CSA	Cl. II, III, Div.1	Cl. I Div.1 / Zone 1	Explosion Proof / Dust Ignition Proof
		CSA	A 20/21		

RN ..003 Angled extension

• •	pos. 3	Process temperature	
• •		1	max. + 80°C (176°F)
• •		2	max. +150°C (302°F)
• •		3	max. +250°C (482°F) (220°C (428°F) für RN 3003 ATEX)
• •	pos. 4	Process overpressure	
• •		1	max. 0.8 bar (11.6psi)
• •		2	max. 5 bar (73psi)
• •		3	max. 10 bar (145psi)
• •	pos. 5	Power supply	
• •	A / S	230V AC 50–60 Hz	Motor Speed: A=1/min S= 5/min
• •	B / T	115V AC 50–60 Hz	Motor Speed: B=1/min T= 5/min
• •	C / U	48V AC 50–60 Hz	Motor Speed: C=1/min U= 5/min
• •	D / V	24V AC 50–60 Hz	Motor Speed: D=1/min V= 5/min
• •	E / W	24V DC	Motor Speed: E=1/min W= 5/min
• •	M / Y	230V AC/115V AC/24V DC multivoltage	Motor Speed: M=1/min Y= 5/min
• •	pos. 6	Process connection	
• •	H	flange 150x150, 4x ø18 LK–ø170	(up to max. 0.8 bar (11.6psi))
• •	I	flange 150x150, 4x ø14 LK–ø170	(up to max. 0.8 bar (11.6psi))
• •	L	flange DN100 PN6, EN 1092–1	(up to max. 5 bar (73psi))
• •	M	flange DN100 PN16, EN 1092–1 .....	.....
• •	U	flange 4" 150lbs ANSI B16.5 .....	.....
• •	pos. 7	Material process connection	
• •	1	aluminium	(up to max. 0.8 bar (11.6psi) / 80°C (176°F))
• •	3	stainless steel	(1.4305 (303))
• •	pos. 8	Length of extension "L"	
• •	1	125 mm (4.92") .....	.....
• •	2	150 mm (5.90") .....	.....
• •	3	200 mm (7.87") .....	.....
• •	4	250 mm (9.84") .....	.....
• •	5	300 mm (11.8") .....	.....
• •	Z	other lengths	price per 50mm (1.97") or part thereof (starting from 0mm) min. 350 mm (13.8"), max. 600mm (23.6")
• •	pos. 9	Material of extension "L"	
• •		(must be the same material as pos.7)	
• •	1	aluminium	
• •	3	stainless steel (1.4305 (303))	
• •	pos. 10	Measuring vane	
• •	A	boot-shaped* 40 x 98mm (1.57 x 3.86") .....	.....
• •	B	rectangular 50 x 98mm (1.97 x 3.86") .....	.....
• •	C	rectangular 50 x 150mm (1.97 x 5.90") .....	.....
• •	E	rectangular 50 x 250mm (1.97 x 9.84") .....	.....
• •	F	rectangular 98 x 98mm (3.86 x 3.86") .....	.....
• •	G	rectangular 98 x 150mm (3.86 x 5.90") .....	.....
• •	I	rectangular 98 x 250mm (3.86 x 9.84") .....	.....
• •	K	hinged vane 98 x 200mm (3.86 x 7.87") double sided .....	.....
• •	S	hinged vane 98 x 100mm (3.86 x 3.93") single sided .....	.....
• •	M	rubber vane 98 x 250mm (3.86 x 9.84") (up to max. 80°C (176°F), not for Ex) .....	.....
• •	Y	without	including splint pin for fixation

Further options and accessories: see page 20



All positions are available in special design (use code "Z").

* maximum length of socket 40mm

RN ..004 Pipe extension horizontal

RN 3004



RN 6004



Housings RN 6004



Version for food applications with option pos.29y (page 20)

Cable entries

Depending on model selected, the following cable entries will be delivered (options see pos 28 on page 20):

Version:	Cable entries:
ATEX flameproof (pos.2 T)	M20x1.5 (1x conduit + 1x Ex-d blind plug)
FM and CSA (pos.2 M,N,S,U)	NPT 1/2" tapered ANSI B1.20.1 (1x conduit + 1x Ex-d blind plug)
All other versions	M20x1.5 (1x screwed cable gland + 1x blind plug)

Dimensions

see pages 23 - 27

Basic type

- RN 3004**
- RN 6004**

pos. 2 Certificate (detailed Ex-markings: see page 27)

Certi- ficate	Zone / Div		Protection method
	Dust	Gas	
0 CE	–	–	
W ATEX	Zone 20/21	–	Dust Ignition Proof
R ATEX	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
T ATEX	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
M FM / CSA	–	–	General purpose
N FM / CSA	Cl. II, III, Div.1	–	Dust Ignition Proof
	CSA A 20/21		
S FM / CSA	Cl. II, III, Div.1	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
	CSA A 20/21		
U FM / CSA	Cl. II, III, Div.1	Cl. I Div.1 / Zone 1	Explosion Proof / Dust Ignition Proof
	CSA A 20/21		

RN 3005 Extra short version

RN 3005



RN 6005
not available

Cable entries

M20x1.5 (1x screwed cable gland + 1x blind plug)
Options see pos.28 on page 20

Dimensions

see pages 23 - 27

RN 3005 Extra short version

Basic type

	RN 3005
•	pos. 2 Certificate
•	0 CE
•	W ATEX Zone 20/21 Dust Ignition Proof (ATEX II 1/2D)
•	pos. 5 Power supply
•	A / S 230V AC 50–60 Hz Motor Speed: A=1/min S= 5/min
•	B / T 115V AC 50–60 Hz Motor Speed: B=1/min T= 5/min
•	C / U 48V AC 50–60 Hz Motor Speed: C=1/min U= 5/min
•	D / V 24V AC 50–60 Hz Motor Speed: D=1/min V= 5/min
•	E / W 24V DC Motor Speed: E=1/min W= 5/min
•	M / Y 230V AC/115V AC/24V DC multivoltage . Motor Speed: M=1/min Y= 5/min
•	pos. 6 Process connection
•	A thread G 1½ inches, DIN 228
•	F thread NPT 1½ inches, conical ANSI B1.20.1
•	pos. 7 Material process connection
•	1 aluminium
•	3 stainless steel (1.4305 / 303)
•	pos. 10 Measuring vane
•	N VT–vane
•	others on request

Further options and accessories: see page 20

Basic type

RN 3005	F	1	1				A	3		
Position	1	2	3	4	5	6	7	8	9	10

← **Order code**

All positions are available in special design (use code "Z").

Options

RN 3001	RN 6001	RN 3002	RN 6002	RN 3002- -rope	RN 6002- -rope	RN 3003	RN 6003	RN 3004	RN 6004	RN 3005
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3			3	3	•
4	4	4	4	4	4	4	4	4	4	4
•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•
5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9
•	10	•	10	•	10	•	10	•	10	•
11	11	11	11	11	11	11	11	11	11	11
•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•
12	12	12	12					12	12	
		13	13							
		14	14							

- Radial shaft sealing**
- pos. 17a FPM (Viton)
- pos. 17b PTFE (Teflon)
- pos. 18x **Stainless steel ball bearing**
for RN ..001/ RN ..002/ RN ..004/ RN ..005
- for RN ..003
- pos. 21x **Weather protection cover**
- (for Ex, only approved for Zone 2 or 22 or Div. 2)
- Mounting set for flange mounting**
- | for flange | for counter flange with | consists of | | | |
|------------|-------------------------|--------------|--------------|-----------|-----------|
| | | screws* | nuts* | washers* | sealing** |
| H | hole ø18 | 4 pcs M16x50 | 4 pcs M16 | 4 pcs | 1 piece |
| pos. 22b | thread M16 | 4 pcs M16x30 | | 4 pcs | 1 piece |
| pos. 22c | H | hole ø18 | 4 pcs M16x60 | 4 pcs M16 | 4 pcs |
| pos. 22d | L | thread M16 | 4 pcs M16x40 | | 4 pcs |
| pos. 22e | M | hole ø18 | 8 pcs M16x60 | 8 pcs M16 | 8 pcs |
| pos. 22f | M | thread M16 | 8 pcs M16x40 | | 8 pcs |
- material stainless A2 **max. 250°C
- Hexagon nut**
- pos. 24a aluminium 1 pc
- pos. 24b aluminium 2 pcs
- pos. 24e stainless steel 1.4305 (303) 1 pc
- pos. 24f stainless steel 1.4305 (303) 2 pcs
- pos. 25x **Fail safe alarm:** for power supply
- 230V AC
- 115V AC /48V AC /24V AC
- 24V DC
- pos. 25y **Output signal DPDT**
- pos. 26x **Heating of housing** 2,5 watts for process temp. to -40°C (-40°F)
- Signal lamp**
- pos. 27a Bulb in cable gland, 2W green
- pos. 27b LED (glass window in lid)
- Cable entry** optionally available:
- pos. 28x M20x1,5 2x screwed cable gland
- pos. 28d M20x1,5 1x screwed cable gland +1x blind plug
- pos. 28a NPT 1/2" tapered ANSI B1.20.1 (1x conduit + 1x Ex-d blind plug)
- pos. 28c NPT 3/4" tapered ANSI B1.20.1 (1x conduit + 1x Ex-d blind plug)
- pos. 29y **Version for food applications** (with FDA sealing)
- pos. 30x **Sliding sleeve**
- for applications without process overpressure
(process connection and material as chosen in pos.6 and 7)
- pos. 31x **Sliding sleeve** (1.4305 (303))
- for applications with process overpressure
(process connection as chosen in pos.6)

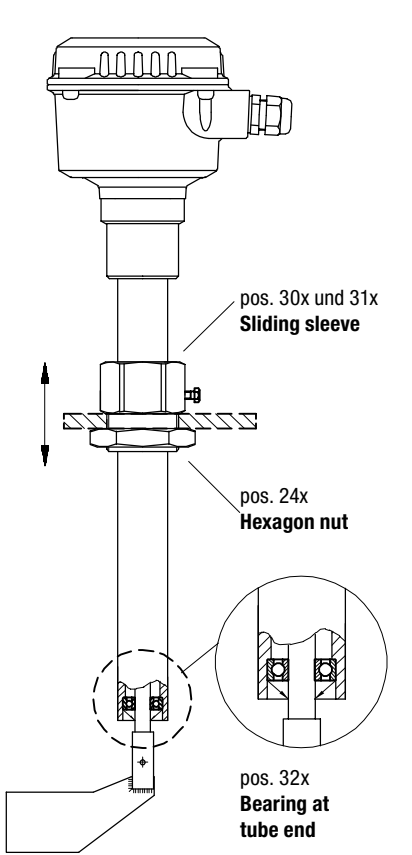
Options

RN 3001	RN 6001	RN 3002	RN 6002	RN 3002- rope	RN 6002- rope	RN 3003	RN 6003	RN 3004	RN 6004	RN 3005
		• •	• •							
		• •	• •							
		• •	• •							
		• •	• •							
15	15	15	15	15	15	15	15	15	15	15
15	15	15	15	15	15	15	15	15	15	15
15	15	15	15	15	15	15	15	15	15	15
15	15	15	15	15	15	15	15	15	15	15
• •										
• •										

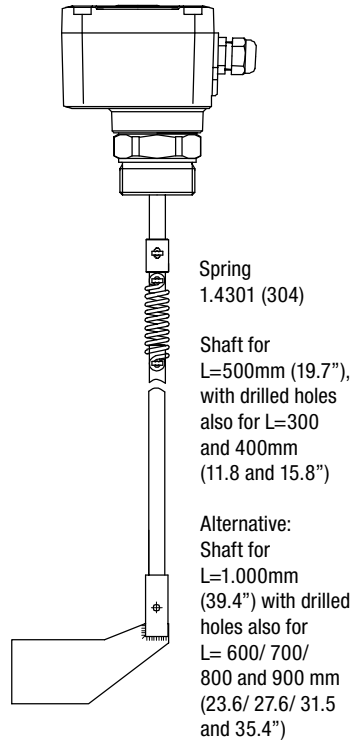
- Pos. 32x **Bearing at tube end**
 max. +80°C (176°F)
 max. +150°C (302°F)
 max. +250°C (482°F)
 max. +600°C (1112°F)
- pos. 33x **Extension and flange welded**
 $\alpha = \text{°}$ min. 0° max. 45°
 for aluminium (see pos. 7/9)
 for stainless steel (1.4305 (303)) (see pos. 7/9)
- pos. 34x **Reinforced rib**
 only in combination with pos. 33, max. $\alpha = 30^\circ$
- Plug**
- pos. 35x Valve connector (incl. mating plug) 4-pole (incl. PE) max. 230V
 pos. 35a M12 (without mating plug) 4-pole max. 230V
 pos. 35b M12 (without mating plug) 5-pole (incl. PE) max. 60V
 pos. 35c Harting Han 4A (incl. mating plug) 5-pole (incl. PE) max. 230V
- Kit "pendulum shaft"**
- pos. 36x L=500 mm (19.7") (drilled holes also for 300 and 400mm (11.8 and 15.8"))
 pos. 36y L=1.000 mm (39.4") (drilled holes also for 600/ 700/ 800 and 900mm
 (23.6/ 27.6/ 31.5 and 35.4"))

- 1 Available for temperatures up to 80°C and for pressure upto 0.8 bar, except M30x1.5 (pos. 6E). Note: 150°C version including FPM as standard.
- 2 Available for temperatures up to 150°C and for pressure upto 0.8 bar, except M30x1.5 (pos. 6E). Note: Above 250°C and 5bar/10bar PTFE included as standard.
- 3 Available for temperatures up to 250°C except M30x1.5 (pos. 6E), not for RN3002-rope strengthened (pos. 1H).
All bearings mounted in the extension are made of stainless steel.
- 4 Available for all versions except explosionproof / flameproof version (pos.2 R,T,S,U).
- 5 Available for all versions except Multivoltage (pos.5 M,Y)
- 6 Available for CE and ATEX except Multivoltage (pos.5M) and rotation control (pos.25x)
- 7 Available for CE (pos.2 O), not in combination with Multivoltage (pos.5 M) or rotation control (pos. 25x), consider reduced switching sensitivity (see technical data).
- 8 Available for CE (pos.2 O), not in combination with weather protection cover (pos 21)
Without connection of stranded wires for installation and internal terminals (standard) or according to customer specification.
- 9 Available for all versions except explosionproof / flameproof version (pos.2 R,T,S,U) not in combination with weather protection cover (pos 21).
- 10 Available for all versions except flameproof version (pos.2 T,U).
- 11 Available for FM/CSA versions (pos.2 M,N,S) except flameproof version (pos.2 T,U).
- 12 Available up to max. 250°C, stainless steel. Not for M30x1.5 (pos. 6E). Not for vane pos.10 K, S, M. RN 3002: only with pos 32.
- 13 Available for CE (pos.2 O).
- 14 Available for temperatures up to 250°C (482°F).
- 15 Available for CE (pos.2 O). Without connection of stranded wires for installation and internal terminals (standard) or according to customer specification.

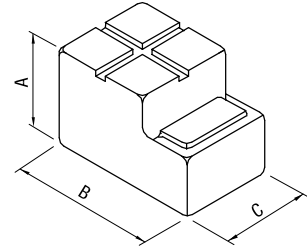
Options



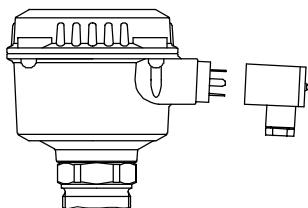
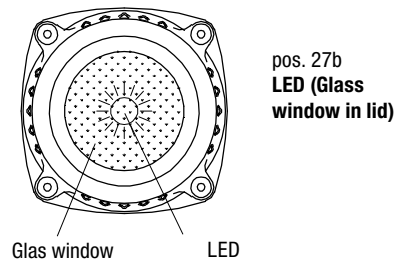
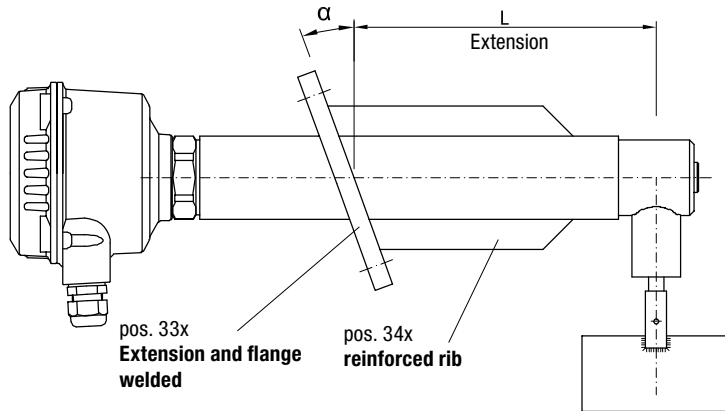
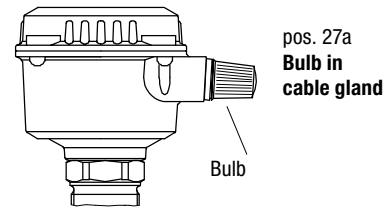
pos. 36
Kit "pendulum shaft"



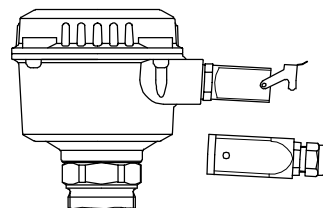
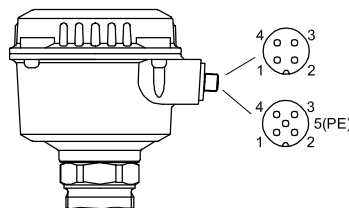
pos. 21x
Weather protection cover



	RN 3000	RN 6000
A	100mm (3.94")	130mm (5.12")
B	165mm (6.30")	200mm (7.87")
C	95mm (3.54")	125mm (4.92")



Pos. 35x
Valve connector
Enclosure plastic
Protection IP65

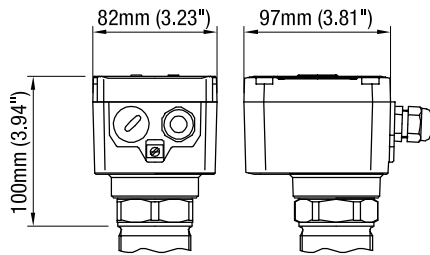


Pos. 35c
Plug Han 4A
Enclosure zinc
Protection IP65

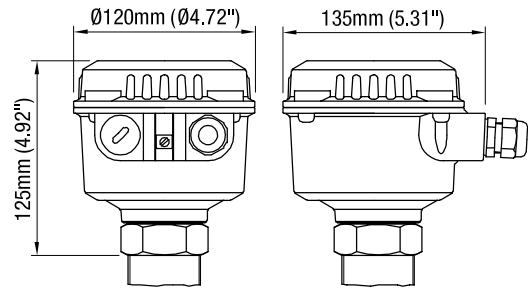
Dimensions

Housing versions

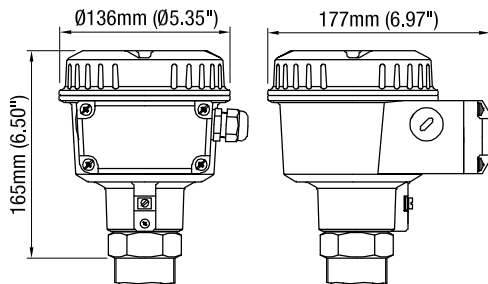
Series RN 3000
Standard



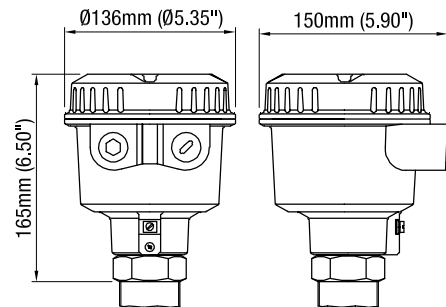
Series RN 6000
Standard



Series RN 6000
de explosionproof with increased
safety terminal box



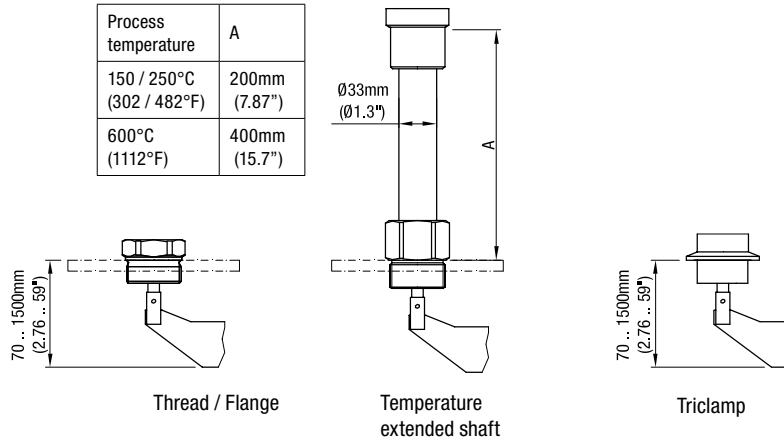
Series RN 6000
d flameproof /explosionproof



Extensions

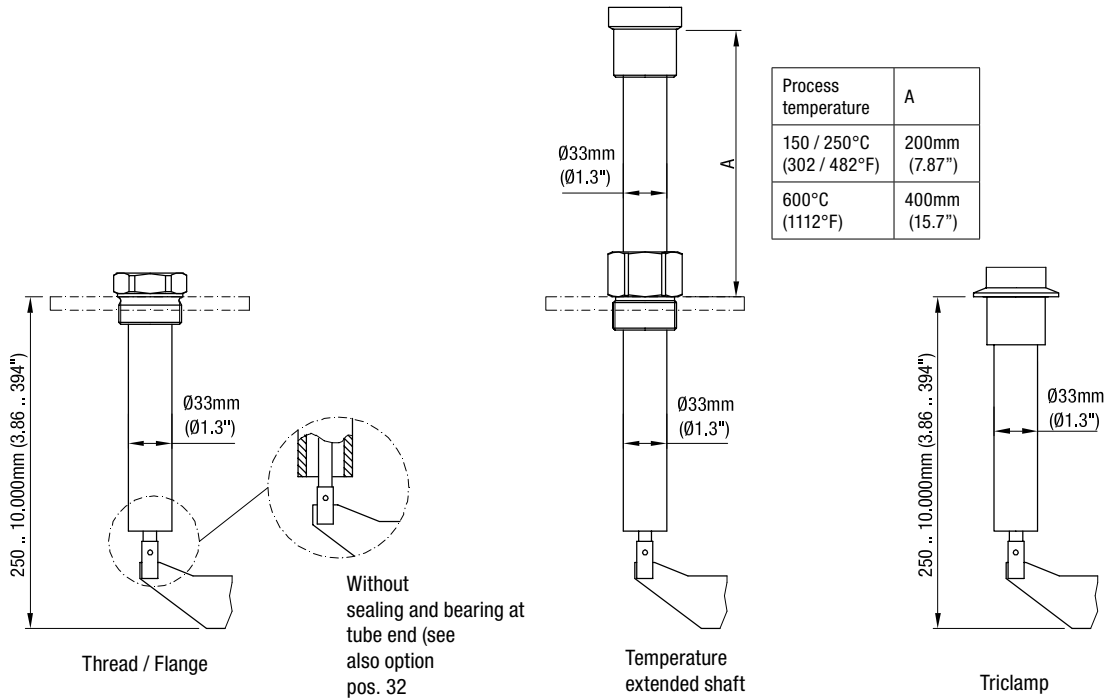
RN ..001

Process temperature	A
150 / 250°C (302 / 482°F)	200mm (7.87")
600°C (1112°F)	400mm (15.7")



Dimensions

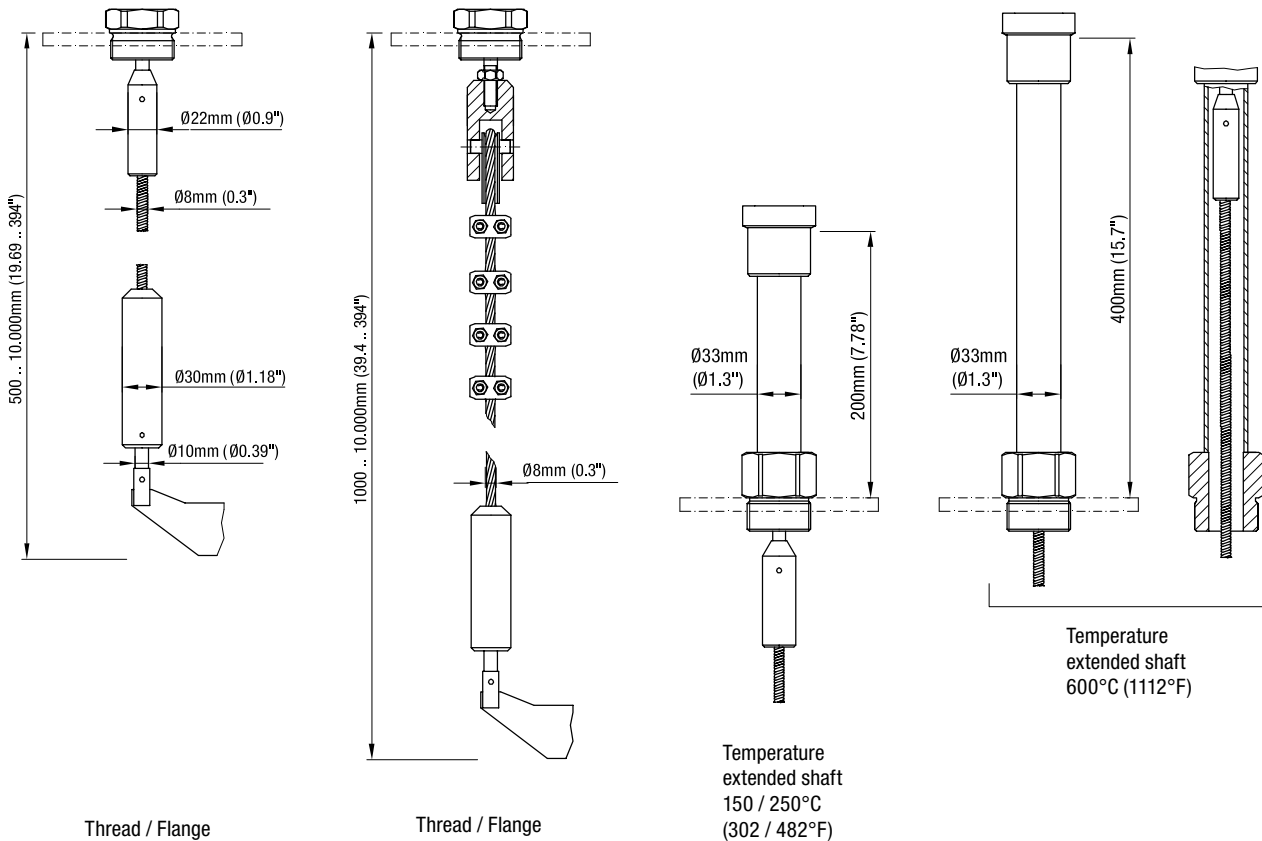
RN ..002



RN ..002 rope

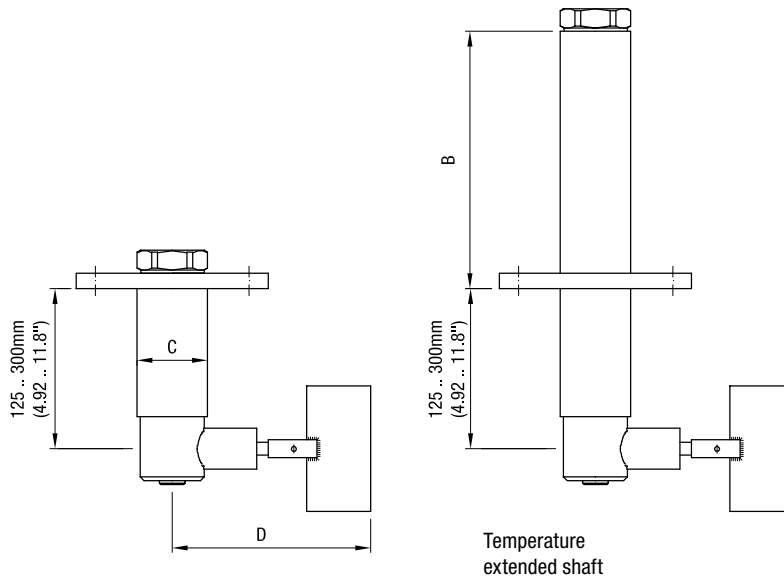
Type standard (pos.1 C)
 (max. 4kN load)

Type reinforced (pos.1 H)
 (max. 28kN load)



Dimensions

RN ..003

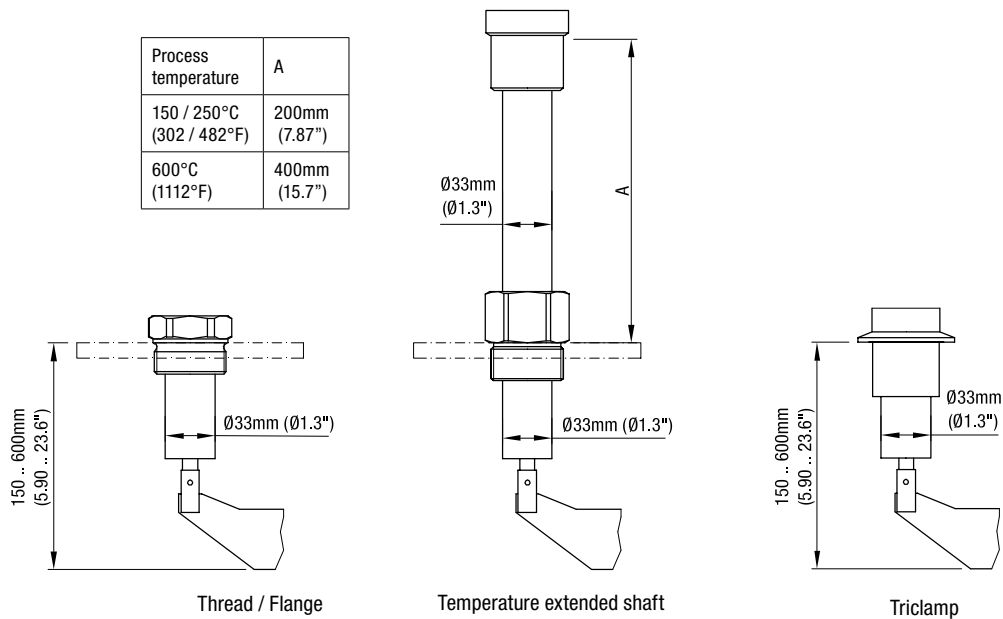


Process temperature	B
80°C (176°F) 0.8 bar (11.6psi)	10mm (0.39")
80°C (176°F) 5/ 10bar (73/ 145psi)	75mm (2.95")
150/ 250°C (302/ 482°F) 0.8/5/10 bar (11.6/73/145psi)	210mm (8.27")

Material	C
steel	ø55mm (2.17")
aluminium	ø60mm (2.36")

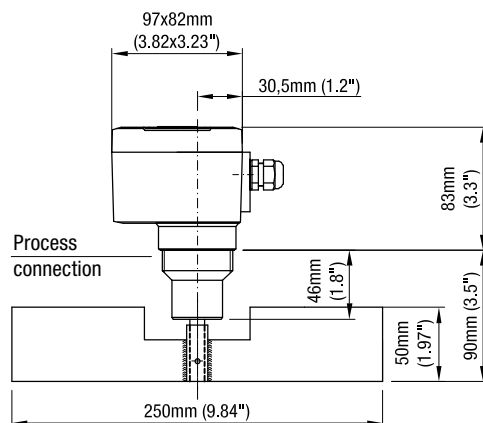
Vane	D
50mm x ..mm (1.97" x ..")	139mm (5.47")
98mm x ..mm (3.86" x ..")	187mm (7.36")

RN ..004



Process temperature	A
150 / 250°C (302 / 482°F)	200mm (7.87")
600°C (1112°F)	400mm (15.7")

RN 3005

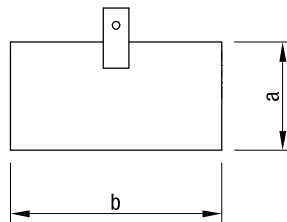


Dimensions

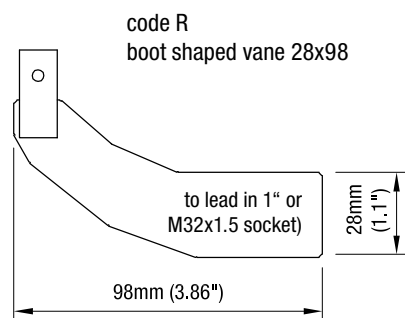
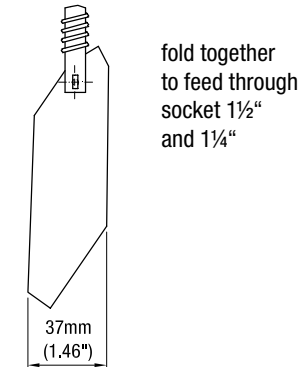
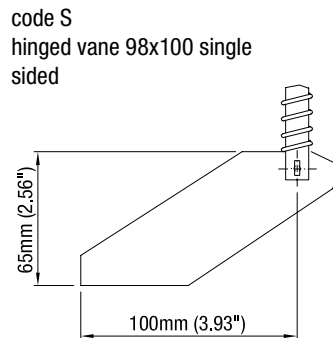
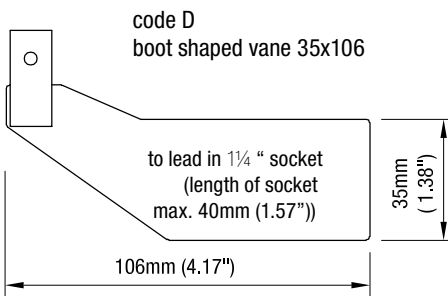
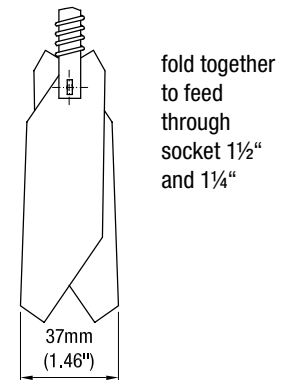
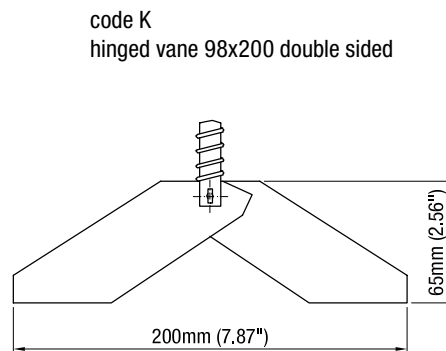
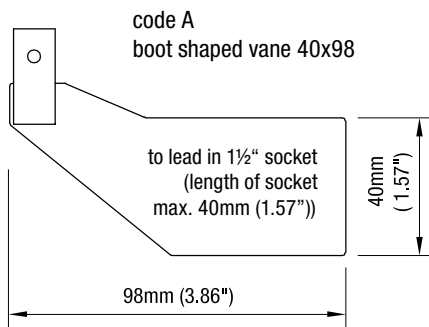
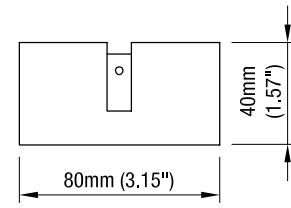
Measuring vanes

code	type	a	b
B	rectangular	50mm (1.97")	98mm (3.86")
C	rectangular	50mm (1.97")	150mm (5.90")
E	rectangular	50mm (1.97")	250mm (9.84")
F	rectangular	98mm (3.86")	98mm (3.86")
G	rectangular	98mm (3.86")	150mm (5.90")
I	rectangular	98mm (3.86")	250mm (9.84")

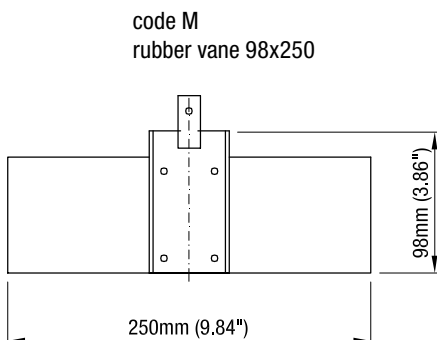
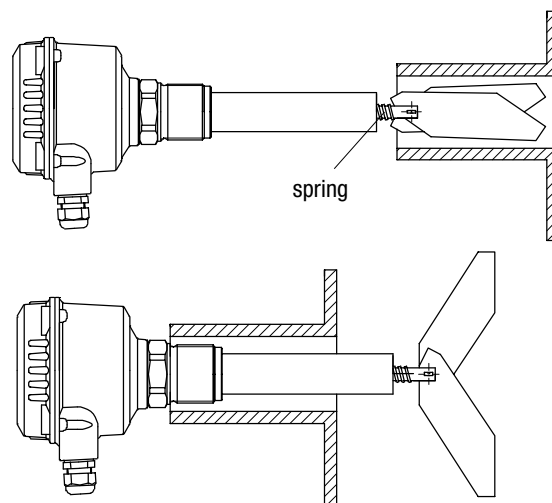
code B,C,E,F,G,I
 rectangular vane



code P
 notched 40x80



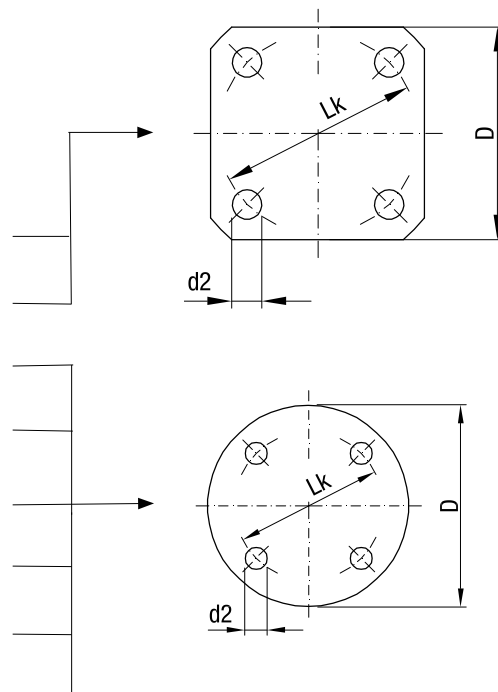
Example: Insertion of the hinged vane through a long socket



Dimensions / Detailed Ex-markings

Flanges

Code	Type	Number of holes	d2	Lk	D	T (thickness)
H	flange 150x150	4	18mm (0.71")	170mm (6.69")	150mm (5.90")	10mm (0.39")
I	flange 150x150	4	14mm (0.55")	170mm (6.69")	150mm (5.90")	10mm (0.39")
K	flange DN32 PN6	4	14mm (0.55")	90mm (3.54")	120mm (4.72")	14mm (0.55")
L	flange DN100 PN6	4	18mm (0.71")	170mm (6.69")	210mm (8.27")	16mm (0.63")
M	flange DN100 PN16	8	18mm (0.71")	180mm (7.09")	220mm (8.66")	20mm (0.79")
S	flange 2" 150lbs	4	19.1mm (0.75")	120.7mm (4.75")	152.4mm (6.01")	19.1mm (0.75")
T	flange 3" 150lbs	4	19.1mm (0.75")	152.4mm (6.01")	190.5mm (7.5")	23.9mm (0.94")
U	flange 4" 150lbs	8	19.1mm (0.75")	190.5mm (7.5")	228.6mm (9")	23.9mm (0.94")



Detailed Ex-markings

pos. 2	Certificate	Housing
0	CE	Standard
W	ATEX II 1/2D	Standard
R	ATEX II 2G EEx de IIC and ATEX II 1/2D	de
T	ATEX II 2G EEx d IIC and ATEX II 1/2D	d
M	FM / CSA general purpose	Standard
N	FM / CSA DIP Cl. II, III Div. 1 Gr. E, F, G CSA Ex DIP A20/21	Standard
S	FM Cl. I Zone 1 AEx de IIC and FM / CSA DIP Cl. II, III Div. 1 Gr. E, F, G CSA Cl. I Zone 1 Ex de IIC and CSA Ex DIP A20/21	de
U	FM XP Cl. I, II, III Div. 1 Gr. B-G and FM Cl. I Zone 1 AEx d IIC CSA XP Cl. I, II, III Div. 1 Gr. B-G CSA Cl. I Zone 1 Ex d IIC and CSA Ex DIP A20/21	d

Electrical installation

AC version

DC version

without fail safe alarm

RN 3000:

Power supply AC version:

24V or 48V or 115V or 230V 50/60Hz
 max. 4VA

Supply voltage as selected (see type plate).
 All voltages $\pm 15\%$ (including 10% of EN 61010)
 Fuse on power supply: max 10A

Power supply DC version:

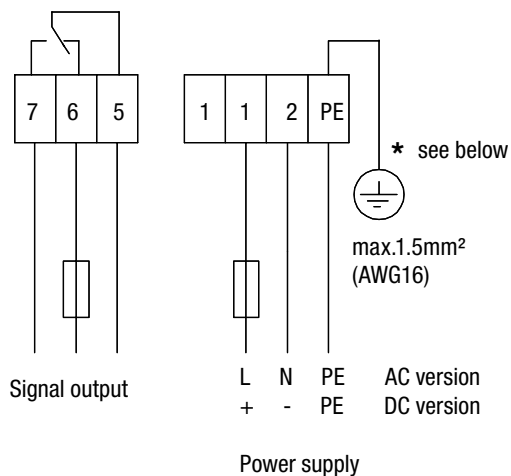
24V DC max. 2.5W

Voltage $\pm 15\%$ (including 10% of EN 61010)
 Fuse on power supply: not necessary

Signal output:

Micro switch SPDT contact:
 max. 2*50V AC, 2A, 500VA ($\cos\phi = 1$)
 max. 300V DC, 2A, 60W

Fuse on signal output: max 10A



RN 6000:

Power supply AC version:

24V or 48V or 115V or 230V 50/60Hz
 max. 4VA

Supply voltage as selected (see name plate).
 All voltages $\pm 15\%$ (including 10% of EN 61010)
 Fuse on power supply: max 10A

Power supply DC version:

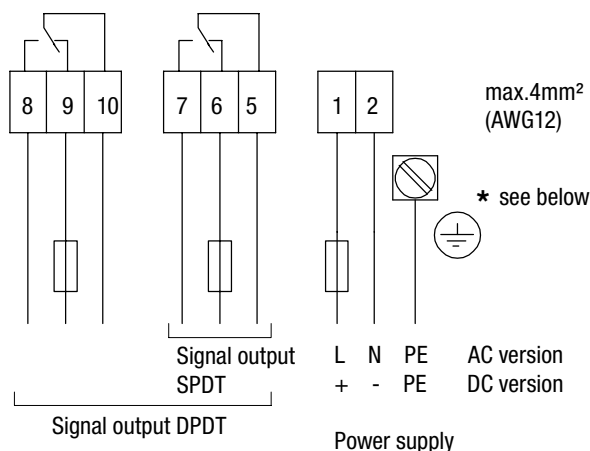
24V DC max. 2.5W

Voltage $\pm 15\%$ (including 10% of EN 61010)
 Fuse on power supply: not necessary

Signal output:

Micro switch SPDT or DPDT contact:
 max. 250V AC, 5A, non inductive;
 max. 30V DC, 4A, non inductive

Fuse on signal output: max 10A



* **Protection against static charging:**
 The PE terminal of the unit must be grounded to avoid static charging of the unit.
 This is particularly important for applications with pneumatic conveying.

Electrical installation

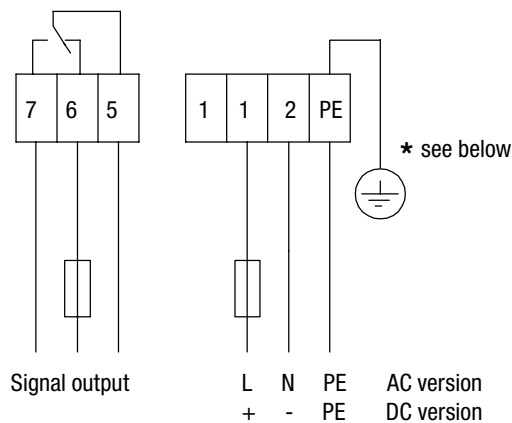
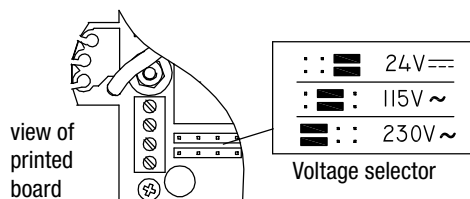
Multivoltage without fail safe alarm

RN 3000:

Power supply:

24V DC	max. 2.5W	or
115V 50/60Hz	max. 4VA	or
230V 50Hz	max. 6VA	

Set the voltage-selector on the PCB to the desired voltage.



Signal output:

Micro switch SPDT contact:
max. 250V AC, 2A, 500VA ($\cos\phi = 1$)
max. 300V DC, 2A, 60W

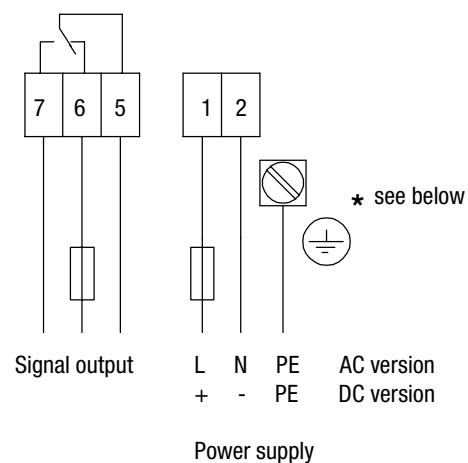
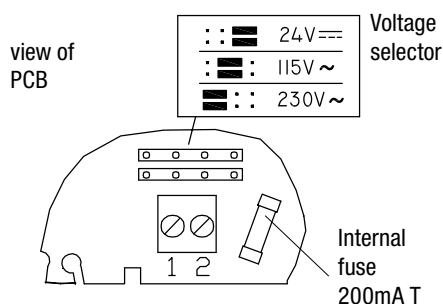
Fuse on signal output: max 10A

RN 6000:

Power supply:

24V DC	max. 2.5W	or
115V 50/60Hz	max. 4VA	or
230V 50Hz	max. 6VA	

Set the voltage-selector on the printed board to the desired voltage.



Signal output:

Micro switch SPDT contact:
max. 250V AC, 5A, non inductive;
max. 30V DC, 4A, non inductive;

Fuse on signal output: max 10A

* **Protection against static charging:**
The PE terminal of the unit must be grounded to avoid static charging of the unit.
This is particularly important for applications with pneumatic conveying.

Electrical installation

AC version DC version

with fail safe alarm

RN 3000:

Power supply AC version:

24V or 48V or 115V or 230V 50/60Hz
 max. 5VA

Supply voltage as selected (see name plate).
 All voltages $\pm 15\%$ (including 10% of EN 61010)

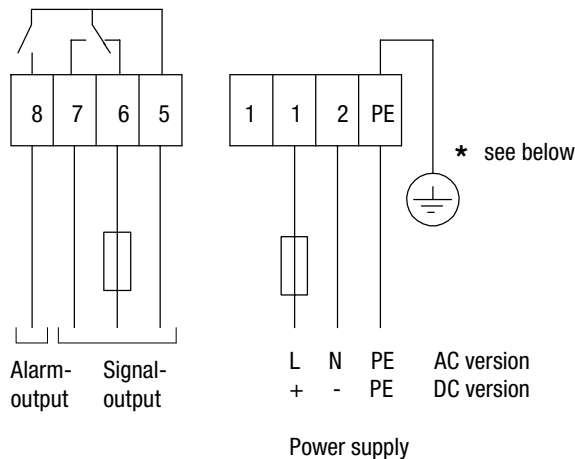
Power supply DC version:

24V DC max. 2,5W
 voltage $\pm 15\%$ (including 10% of EN 61010)

Signal output: Micro switch on terminal 5-6-7
Alarm output: Relay on terminal 8

Relay and Micro switch SPDT contact:
 max. 250V AC, 2A, 500VA ($\cos\phi = 1$)
 max. 300V DC, 2A, 60W

Fuse on signal output: max 10A



RN 6000:

Power supply AC version:

24V or 48V or 115V or 230V 50/60Hz
 max. 5VA

Supply voltage as selected (see name plate).
 All voltages $\pm 15\%$ (including 10% of EN 61010)

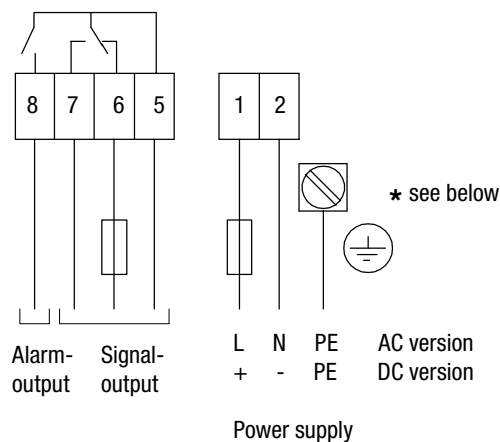
Power supply DC version:

24V DC max. 2.5W
 voltage $\pm 15\%$ (including 10% of EN 61010)

Signal output: Micro switch on terminal 5-6-7
Alarm output: Relay on terminal 8

Relay and Micro switch SPDT contact:
 max. 250V AC, 5A, non inductive;
 max. 30V DC, 4A, non inductive;

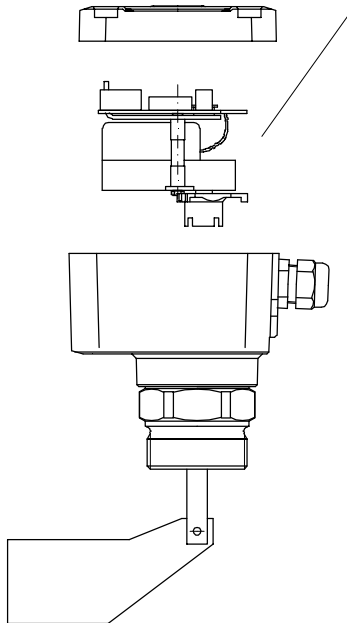
Fuse on signal output: max 10A



- * **Protection against static charging:**
 The PE terminal of the unit must be grounded to avoid static charging of the unit.
- ! This is particularly important for applications with pneumatic conveying.

Spare parts

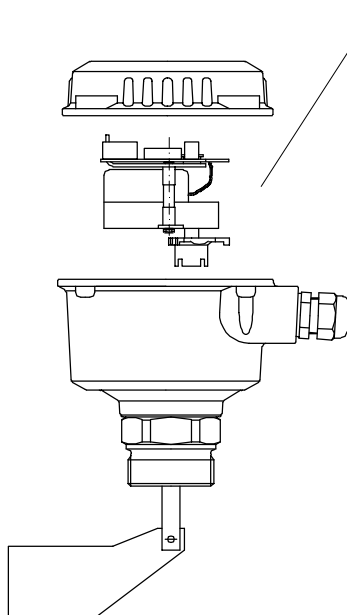
Series RN 3000



Motor / PCB (without heating)

Article number		with fail safe alarm	without fail safe alarm
Motor speed			
1/min	5/min		
gm102000	gm103000		230V 50-60Hz
gm102005	gm103005		115V 50-60Hz
gm102015	gm103015		48V 50-60Hz
gm102010	gm103010		24V 50-60Hz
gm102020	gm103020		24V DC
gm102025	gm103025		230V AC/115V AC/24V DC multivoltage
gm104000	gm105000		230V 50-60Hz
gm104005	gm105005		115V 50-60Hz
gm104020	gm105020		24V DC

Series RN 6000



Motor / PCB (without heating)

Output signal SPDT

Article number		with fail safe alarm	without fail safe alarm
Motor speed			
1/min	5/min		
gm112000	gm113000		230V 50-60Hz
gm112005	gm113005		115V 50-60Hz
gm112015	gm113015		48V 50-60Hz
gm112010	gm113010		24V 50-60Hz
gm112020	gm113020		24V DC
gm110000	gm120000		230V AC/115V AC/24V DC multivoltage
gm114000	gm115000		230V 50-60Hz
gm114005	gm115005		115V 50-60Hz
gm114020	gm115020		24V DC

Output signal DPDT

Article number		without fail safe alarm
Motor speed		
1/min	5/min	
gm116000	gm117000	230V 50-60Hz
gm116005	gm117005	115V 50-60Hz
gm116015	gm117015	48V 50-60Hz
gm116010	gm117010	24V 50-60Hz
gm116020	gm117020	24V DC

